Board Members,

Staff report and Resolution for agenda item 13A the Folsom Dam Safety and Flood Risk Reduction Project is included. A synopsis of the changes between the draft and final Supplemental EA/EIR (SEA/EIR), Findings and Statement of Overriding Considerations will be e-mailed to you shortly.

Efforts to incorporate mitigation and best management practices have been made for all significant impacts however potentially significant impacts remain. Incorporation of the final revisions to the recently circulated SEA/EIR have delayed final printing and delivery for your review. Staff will have a hard copy of the final document available on the day of the board meeting.

Thank You

# Meeting of the Central Valley Flood Protection Board August 26, 2010

### **Staff Report**

RESOLUTION 10-32
FOLSOM DAM SAFETY AND FLOOD DAMAGE REDUCTION
CERTIFICATION OF SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT/
ENVIRONMENTAL IMPACT REPORT FOR THE CONSTRUCTION OF THE
CONTROL STUCTURE, CHUTE, AND STILLING BASIN
FOLSOM, CALIFORNIA

#### <u>Item</u>

Consideration of Resolution 10-32 for the Folsom Dam Safety and Flood Damage Reduction Joint Federal Project (JFP) to certify the Supplemental Environmental Assessment/ Environmental Impact Report for the construction of the control structure, chute, and stilling basin at Folsom, California.

#### Sponsors

The Folsom Dam Safety and Flood Damage Reduction Project also referred to as the JFP is a cooperative effort between the U.S. Department of Interior, Bureau of Reclamation (Reclamation), the U.S. Army Corps of Engineers (USACE), the State of California Central Valley Flood Protection Board (CVFPB), and the Sacramento Area Flood Control Agency (SAFCA).

#### Location and History

The project is located downstream from the confluence of the North and South Forks of the American River, near the City of Folsom. Folsom Dam is located about 20 miles northeast of Sacramento. Folsom Reservoir has a capacity of 977,000 acre-feet with a surface area of 11,450 acres. Folsom Dam was originally authorized in 1944 for flood control, but was reauthorized in 1949 as a multi-purpose facility. The USACE constructed Folsom Dam and transferred it to Reclamation for coordinated operation as an integral part of the Central Valley Project (CVP). Construction of the dam began in October 1948 and was completed in May 1956. Water was first stored in February 1955.

Folsom Dam is a concrete gravity dam 340 feet high and 1,400 feet long. The main section is flanked by two earthfill wing dams. The Right Wing Dam is 6,700 feet long and 145 feet high and the Left Wing Dam is 2,100 feet long and 144 feet high. In addition to the main section and wing dams, there is one auxiliary dam and eight smaller earthfill dikes. All retention structures have a crest elevation of 480.5 feet above mean sea level. The concrete dam has a solid parapet wall with a top elevation of 484 feet. Folsom Reservoir's normal operating pool is 977,000 acre-feet with a reservoir water surface at elevation 466 feet. The design surcharge pool is 1,084,780 acre-feet at reservoir water surface elevation 475.4 feet,

with 5.1 feet of existing freeboard. The new auxiliary spillway is located on the left abutment of the main dam, immediately downstream of the existing left wing dam.

### Description

The project area consists of the site of the ongoing spillway construction including all haul routes, staging, and disposal areas. The staging areas, disposal areas, and haul roads that would be used for this project were previously evaluated in the FEIS/EIR (Reclamation /CVFPB 2007)

The flood damage reduction features of the JFP include the construction of a gated auxiliary chute southeast of the main dam. Initial excavation of the chute has been initiated by Reclamation and is expected to be completed in late summer of 2010. As part of the FEIS/EIR, the evaluation of the auxiliary chute included the control structure, the lining of the spillway chute and stilling basin. These features were generally addressed in 2007. The potential effects, based on the level of design at the time, were analyzed. However, design refinements have indicated that additional analysis and documentation is needed. Therefore, design refinements evaluated in this Supplemental Environmental Assessment/Environmental Impact Report (SEA/EIR) include the construction of the control structure, installation of the six Tainter gates (a feature of the control structure), the lining of the chute and stilling basin, and exploratory geotechnical borings.

# CEQA/ NEPA Determinations and History:

Determinations related to flood management, studies, and actions in the American River basin, the major documents are listed below:

- 1991 American River Watershed Investigation and Environmental Impact Statement/Environmental Impact Report (EIS/EIR).
- 1996 Supplemental Information Report and EIS/EIR.
- 1998 SAFCA's Folsom Dam Modification Report.
- 2002 American River Watershed Long-Term Study and EIS/EIR.
- 2004 Folsom Dam Modification Limited Revaluation Report and Environmental Assessment/Initial Study (EA/IS).

In March of 2007, the USACE prepared the Post Authorization Change for the American River Watershed Project which revaluated the Folsom Dam Raise Project, along with the Folsom Modifications Project resulting in the recommendation of the JFP. The FEIS/EIR for the JFP was also issued in March 2007. The FEIS/EIR was prepared by Reclamation with the USACE as a Cooperating Agency.

A Record of Decision was issued in May of 2007 by Reclamation for the Dam Safety and Dam Security authorities. A separate Record of Decision for the JFP, including authorities for the Auxiliary chute was jointly issued by the Corps and Reclamation in June of 2007.

The Reclamation Board now the CVFPB adopted Resolution 07-03 in July 2007. This resolution certified and approved the Folsom Dam Safety and Flood Risk Reduction Project.

In August of 2009, a Final Supplemental EA/IS was issued for the potential for early excavation of the approach channel. Since this current document is also supplement to the FEIS/EIR, this SEA/EIR incorporates it by reference, summarizes existing conditions, and focuses on any refinements since the preparation of that document. All of the documents referenced above are available upon request from the USACE. However, many of the design

elements of the auxiliary chute were preliminary in nature and the FEIS/EIR noted that design refinements would be needed prior to construction.

This Supplemental EA/EIR describes the construction and evaluates the effects of the control structure, lining of the chute and stilling basin, and the exploratory borings for the approach channel construction. This SEA/EIR (1) describes the existing environmental resources in the project area; (2) evaluates the effects and significance of the action alternative on the resources; (3) proposes measures to avoid, minimize, or mitigate most adverse effects to a less-than-significant level; and (4) determines the project has the potential to have a cumulatively significant impact from greenhouse gas emissions.

This SEA/EIR is in compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and provides full disclosure of the effects of the proposed action.

# Staff Comments and Endorsements:

- The SEA/EIR has been reviewed by staff, public and resource agencies. Comments have been incorporated in the final SEA/EIR. Staff recommends that the SEA/EIR be certified by the CVFPB as CEQA lead under Resolution 10-32.
- This EA/EIR, if not certified by the CVFPB could cause funding interruptions, breaking of agreements, and project delay
- Board staff and board legal counsel have reviewed the SEA/EIR and recommend Board certification of Resolution 10-32.

# Section 8610.5 Considerations

- Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:
  - The Board will make its decision based on the evidence in the attachments, this staff report, and any other evidence presented by any individual or group.
- 2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.
  - In considering this SEA/EIR, the CVFPB has used the best available science relating to the issues presented by all parties. On the important issue of hydraulic impacts, the American River improvements will result in a better engineered flood control system with no adverse upstream or downstream hydraulic impacts.
- 3. Effects of the decision on the entire State Plan of Flood Control:
  - This project has positive effects on the State Plan of Flood Control as it results in a better-constructed flood facilities system for the American River and will contribute to

provide the Central Valley Flood Protection Plan's goal of 200-year protection for urban areas.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

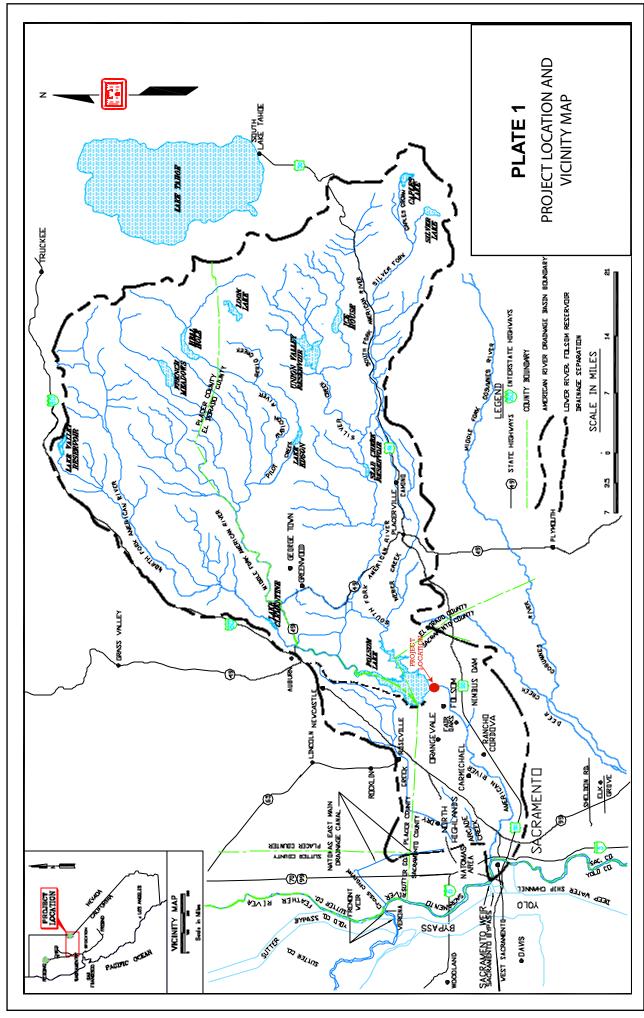
Impacts of hydrology, climate, and development are addressed in the many environmental documents listed above. Previous and future project designs and environmental documentation have addressed and will continue to address these concerns through public comment periods and agency reviews. Significant impacts will be substantially lessened or mitigated for though potentially cumulative significant impacts from greenhouse gas emissions remain.

#### Staff Recommendation

Staff recommends that the CVFPB delegate authority for Board President Carter to certify the Final SEA /EIR.

#### List of Attachments

- A. Project Location Map
- B. Summary of changes to the Supplemental EA/EIR (To Be Provided by E-Mail)
- C. CEQA Findings (To Be Provided by E-Mail)
- D. Resolution 10-32



ORIGINAL SOURCE: AMERICAN RIVER WATERSHED PROJECT, CALIFORNIA, LONG TERM STUDY, FINAL SUPPLEMENTAL PLAN FORMULATION REPORT/EIS/EIR, 2002, US ARMY CORPS OF ENGINEERS, SACRAMENTO DISTRICT This map is for illustrative purposes only. Some features may not be to scale.

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# STATE OF CALIFORNIA THE CALIFORNIA NATURAL RESOURCES AGENCY CENTRAL VALLEY FLOOD PROTECTION BOARD

## **RESOLUTION 10-32**

AUGUST 26, 2010

FOLSOM DAM SAFETY AND FLOOD DAMAGE REDUCTION
CERTIFICATION OF SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT/
ENVIRONMENTAL IMPACT REPORT FOR THE CONSTRUCTION OF THE
CONTROL STUCTURE, CHUTE, AND STILLING BASIN
FOLSOM, CALIFORNIA

WHEREAS, the Folsom Dam Safety and Flood Damage Reduction Project is a Joint Federal Project (JFP) authorized by Congress in the Water Resources Development Act of 1999, and by the California legislature in Water Code Section 12670.14(c); and

WHEREAS, the JFP is a cooperative effort by the US Bureau of Reclamation (Reclamation), US Army Corps of Engineers, (USACE), the Central Valley Flood Protection Board, (Board) and Sacramento Area Flood Control Agency (SAFCA) to improve dam safety and flood protection to the Sacramento area by making improvements to Folsom Dam and associated structures; and

WHEREAS, the Board certified the Final Folsom Dam Safety and Flood Damage Reduction Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) and approved the JFP in July 2007 (Reclamation/CVFPB 2007), and a Notice of Determination was filed July 27, 2007 with the State Clearinghouse; and

WHEREAS, the JFP consists of multiple actions over many years, with the USACE, the Board and SAFCA responsible for the flood damage reduction portions, including the Control Structure, Chute, and Stilling Basin; and

WHEREAS, the 2007 FEIS/EIR contained a general evaluation of the auxiliary spillway including: the control structure, the lining of the spillway chute, and stilling basin; these features and their potential impacts were analyzed based on the level of design available at that time; and

WHEREAS, recent project design refinements of the control structure construction, the six Tainter gates installation (a feature of the control structure), the lining of both the spillway chute and stilling basin, and the exploratory geotechnical borings require additional environmental analysis and are evaluated in this Supplemental Environmental Assessment/Environmental Impact Report (SEA/EIR); and

WHEREAS, this SEA/EIR (State Clearinghouse No. 2006022091) was circulated for public and agency review from June 28 to August12, 2010 and responses to the comments received have been incorporated into the Final SEA/EIR; and

WHERAS, the Board is the lead agency under the California Environmental Quality Act (CEQA) for the SEA/EIR; and

WHEREAS, a Statement of Findings for each potentially significant impact that would result from the construction of the JFP, including a Finding of Overriding Considerations for unavoidable significant impacts has been prepared and is attached to this Resolution:

# NOW, THEREFORE BE IT RESOLVED that the Board:

- Has considered the Final Supplemental Environmental Assessment/ Environmental Impact Report and finds, on the basis of the whole record, including comments and written responses received on the draft document and mitigation measures, that the Final SEA/EIS reflects the independent judgment of the Board; and
- 2. In compliance with CEQA Guidelines Section 15091, the Board finds that changes and alterations have been required in, or incorporated into, the project which avoid or substantially lessen most of the significant environmental effects identified in the Final SEA/EIR, in the attached Statement of Findings; and
- Specific economic and technological considerations make it infeasible for the
  mitigation measures identified in the Final SEA/EIR to reduce the impacts to less
  than significant and that the benefit to society from improved flood protection
  override the remaining unavoidable significant impacts as described in the
  Statement of Overriding Considerations; and
- 4. Certifies this Final SEA/EIR has been completed in compliance with CEQA as the CEQA lead agency, and adopts findings, and a statement of overriding considerations; and
- 5. Approves the design refinements for the Folsom Dam Safety and Flood Damage Reduction Joint Federal Project (JFP).

BY:	Date:	
Benjamin F. Carter President		
BY:	Date:	
Secretary		
Approved as to Legal Form and Sufficiency		
Nancy Finch		
Senior Staff Counsel		